



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>



**DETROIT PUBLIC SCHOOLS**

**Vocational Bureau**

**Opportunities and Requirements**  
**in**  
**Local Occupations**



Published by the Authority of the  
Detroit Board of Education  
City of Detroit  
1922

Copyright, 1922, by A. H. Edgerton.

The right to print and modify this work for  
use in Detroit has been assigned to the  
Board of Education  
City of Detroit

LC  
1505  
.D6  
A3

Mr. Q. B. Moehlman

gt.

10-31-1923

## Foreword

This is the first of a series of studies resulting from continuous investigations and analyses of the various important industrial, commercial, and professional occupations in Detroit. In keeping with the policy of the Board of Education, such factual material as is needed for considerations relative to the nature of the work, the advantages and disadvantages, the qualifications and training, the possibilities, the remuneration and advancement, and the like is collected first hand. These data are evaluated and prepared for convenient use in intermediate schools, continuation classes and high schools, as a part of the whole program for providing systematic educational and vocational guidance. The analyses have been organized and published in this form in order that these valuable facts pertaining to the relative opportunities and requirements in different pursuits may be made immediately available for constant use by counselors, house principals, and teachers who are confronted with the responsibility of (1) imparting reliable information on occupational possibilities and employment conditions, and (2) assisting pupils in more wisely choosing educational and vocational advantages.

The Vocational Information and Guidance Department, which has general charge of occupational surveys and school counseling, is seeking the co-operation of all members of the school organization who are in any manner concerned with the problems of guidance and counsel, either through actual teaching or teacher training or administrative connection. The actual working force of the central office is being greatly extended as a result of such cooperation. This is illustrated by the contents of this bulletin which has been made possible by connecting up these occupational surveys with a program of counselor training during the past year. Resulting from a decision of the Board of Education to cooperate with the University of Michigan in providing adequate training facilities for school counseling, the services of over fifty advanced students, who were either teachers, supervisors, or administrative officers connected with the Detroit schools, have made it possible to secure and check the results contained in this publication within a comparatively short period. Throughout this program of collection and dissemination of information there is a desire to take advantage of the findings and implica-

tions resulting from all similar surveys that have been conducted either locally or nationally, and field work is undertaken only after careful investigation of all possible sources of suggestive material.

The following statements of composite conditions included in this bulletin on "Opportunities and Requirements in Local Occupations" were carefully collected and checked by those whose names appear in connection with each unit surveyed, with such assistance as was needed from the special investigators of the central office. All concerned are deeply indebted to the many representatives of the industrial, commercial and professional establishments in Detroit, who have so generously aided the public schools in securing these helpful sources of reliable information, in order that our boys and girls may deal more intelligently with the problems of an efficient choice, both as to self expression and efficient service.

A. H. EDGERTON,  
Supervisor of Vocational Information and Guidance.

# DEPARTMENT STORE OCCUPATIONS

This investigation was conducted by Margaret Boland, Flora Anderson, Alice Gordon, and Grace Jones in co-operation with the Vocational Information Division of the Vocational Bureau.

## TABLE OF CONTENTS

| Occupation                    | Pages  |
|-------------------------------|--------|
| Wrapper-Inspector .....       | 6, 7   |
| Cashier-Inspector .....       | 6, 7   |
| Stock Boy or Girl.....        | 8, 9   |
| Marker .....                  | 8, 9   |
| Messenger Boy .....           | 10, 11 |
| Wagon Boy or Jumper.....      | 10, 11 |
| Helper .....                  | 12, 13 |
| Driver or Chauffeur.....      | 12, 13 |
| Shipping Clerk .....          | 14, 15 |
| Aisle or Booth Girl.....      | 14, 15 |
| Salesperson .....             | 16, 17 |
| Head of Stock.....            | 16, 17 |
| Buyer .....                   | 18, 19 |
| Floor Manager .....           | 20, 21 |
| Manager, Superintendent ..... | 20, 21 |

**WRAPPER-INSPECTOR**

(Where this position does not exist the duties are included in that of cashier-inspector.)

Prepares materials, wraps parcels, enclosing folded duplicate sales. Checks sales slip with merchandise for price and quantity, for imperfections or wrong goods. Examines for required OK's. Stamps or numbers. If changes are to be made, returns sales slip and merchandise to salesperson or reports to floor manager. Secures authorization for charges. If take sale, calls salesperson by number when package is wrapped. Otherwise, sends package to proper destination. Maintains supplies. Issues new sales books, special forms and stickers to salespeople. Keeps desk clean and stamp inked. Answers phone. Places ads. in packages.

Direct contact with a group of older, experienced co-workers; possibility of promotion.

Demand on speed, accuracy and alertness tends to cause nervous strain during rush hours.

None.

Basement work not always satisfactory because of poor ventilation or dampness from washed air.

Intermediate.

Store rules and procedure. Loose knowledge of prices, sales slips, purpose and destination. Knowledge and selection of wrapping materials. How to handle all transactions. Requisitions for materials. Trade terms. Store policy and ideals. Position in the organization; store system; making change; handling bills and carriers.

Preparing materials and wrapping. Deftness in handling goods.

Quickness, accuracy, deftness, neatness, courtesy, co-operation, coolheadedness, honesty.

**CASHIER-INSPECTOR**

Secures day's cash, counts and arranges money, makes change, inspects refunds, checks, money orders, etc., for proper OK's, refuses counterfeit money. Makes deposit of extra currency at times specified, cashier's report at night, etc. Stamps and tears the sales slip, files the proper portion and returns change with salesperson's voucher. Orders supplies needed, such as report blanks, etc. Issues new sales books, special forms and stickers to salespeople. Compares merchandise and price mark with sales check (mdse., quantity, price, etc.) Inspects sales slip for quantity and price and merchandise for perfection. Wraps packages. Keeps desk clean and stamp inked. Answers phone. Places ads. in packages. Handles carriers.

Direct contact with a group of older, experienced co-workers; possibility of promotion. A few stores encourage accuracy by giving time off if worker is even in cash for stated time.

Demand on speed, accuracy, and alertness tends to cause nervous strain during rush hours. Responsibility of rapidly handling large sums of money and merchandise is also somewhat of a strain.

None.

Basement work not always satisfactory because of poor ventilation or dampness from washed air. Slight danger from handling dirty money.

Intermediate.

Store rules and procedure. Making change, handling bills, rolling money; sales slips, purpose and destination. Store policy and ideals. Position in the organization; store system. Handling carriers.

Handling money rapidly and accurately. Wrapping packages and handling merchandise.

Quickness, accuracy, deftness, neatness, courtesy, co-operation, coolheadedness, honesty, speed, patience.

**WRAPPER-INSPECTOR**

Classes where "system" is taught in the larger stores. Instruction on the job by supervisors, heads of depts., etc.

Some appreciation of store problems and much of the information as to merchandise and customs which would be of value to one as a salesperson. Store procedure and regulations.

Deftness in handling goods and wrapping.

Entirely.

Relief cashier, marker, office clerk, salesperson.

---

\$8.00 to \$15.00.

---

10% to 20% discount on all purchases in store.

---

About 8 hrs.

---

Between Thanksgiving and Christmas, April to June, and during special sales.

February, July and August.

Constant for most.

---

No.

---

17 yrs. (15 or 16 yrs. with permit.)

---

Short period (a few days) until store system of making out sales slips and wrapping is learned.

---

Yes.

---

Increasing.

---

Girls leaving school.

---

Lack of interest in work; failure to appreciate opportunities; carelessness and inattention; lack of responsibility and dependability. (This is controlled in some stores by constant supervision and close follow up.)

**CASHIER-INSPECTOR**

Classes where "system" is taught in the larger stores. Instruction on the job by supervisors, heads of depts., etc.

Familiarity with making change and various kinds of money, checks, etc. Sales slips, store procedure and regulations.

Speed and accuracy in handling money.

Entirely.

Tube room, office or special cashier; comptometer operator, office work other than stenographic, aisle girl, salesperson.

---

\$8.00 to \$15.00

---

10% to 20% discount on all purchases in store.

---

About 8 hrs.

---

Between Thanksgiving and Christmas, April to June, and during special sales.

February, July and August.

Constant for most.

---

No.

---

17 yrs. (15 or 16 yrs. with permit.)

---

2 days to 2 months.

---

Yes.

---

Increasing.

---

Girls leaving school, inspectors.

---

Lack of interest in work; failure to appreciate opportunities; carelessness; absent-mindedness; lack of responsibility and dependability. (This is controlled in some stores by constant supervision and close follow up.)

**STOCK BOY OR GIRL**

Assists in the care of merchandise in his or her department. Sees that merchandise is in order. Brings new merchandise from stockroom or takes merchandise to "bargain pit" or table. Keeps department in good appearance. Reports any merchandise not in perfect condition. Makes minor repairs. Acts as department messenger. Calls attention of buyer to incoming merchandise and assists in checking from invoice. Fill orders from department. Makes record of goods taken from or received in stockroom. Gives a correct account at any time of the merchandise of each kind in reserve and in the department. Calls attention of buyer to low or slow selling merchandise. Takes Lay Aways and H. F. A.'s to Lay Away department. Hangs stock. Watches customers. Runs errands. Folds and sizes blouses.

Possibility of promotion. Good opportunity to learn merchandise. In close touch with selling end, often helps sell. Clean work. Contact with different people. Variety of work. Attractive stock.

Physical strain from being on feet too much, and from hanging stock, especially the heavy lifting in the coat and fur departments.

None.

Basement work not always satisfactory because of poor ventilation or dampness from washed air. Conditions good as they handle only new merchandise.

Intermediate.

Store rules and regulations, policy and organization. Arranging, marking, and care of merchandise. Noting defects, taking inventory of stock, marking goods. Sales slips.

Handling merchandise with care.

Accuracy, quickness, willingness to serve, orderliness, power of observation, initiative, good memory, penmanship, ambition.

**MARKER**

Receives supply of goods to be marked and tickets for marking them. Puts the required kind of price ticket in the appropriate place on each piece of merchandise. Handles merchandise with care, keeping it in the original folds. Makes sure all articles are marked. In case goods are to be remarked, removes price tags. Reports errors on the part of marker. Runs ticket machine for marking pin tickets and stickers. If price tags or stickers are to be marked by hand, copies model number and price from mark on top box or other given mark and writes tags or stickers according to instruction. Places mark or symbol on each box or container to indicate goods inside have been marked. Assists head marker to check merchandise with invoice. Reports damaged or missing merchandise.

Opportunity of gaining general knowledge or merchandise.

To some degree, the continuous routine of handling small tickets and figures, crowded work (demand for rush orders for many departments) involves nervous strain.

None.

None.

Intermediate.

Store rules and regulations, policy and organization. Care of merchandise, marking goods and running ticket machine. Kinds of tickets and methods of putting on goods.

Running ticket machine and handling goods.

Accuracy, carefulness, deftness, quickness.

**STOCK BOY OR GIRL**

Instruction is usually given by others in department.

Knowledge of stock, kinds, qualities, prices, marking, etc. and inventory. Store procedure and regulations. Position of stock.

Deftness in handling goods.

Entirely.

Head stock boy or girl, marker, office position, head of stock room, salesperson, assistant buyer, buyer.

\$7.00 to \$15.00.

10% to 20% discount on all purchases in store.

About 8 hours.

Between Thanksgiving and Christmas, April to June, and special sales.

February, July, and August.

Constant for most. Stock help always needed.

No.

17 years (15 or 16 years with permit.)

2 or 3 months depending on stock handled.

Yes.

Increasing.

Boys and girls leaving school. Promotions from cashier-inspectors.

Lack of interest in work; failure to appreciate opportunities; inaccuracy in matching merchandise.

**MARKER**

Instruction given on the job by supervisors.

Marking goods. Detecting damaged goods. Store procedure and regulations. General knowledge of merchandise.

Deftness in handling goods and using ticket machine.

Entirely.

Lister or ticket marker, office clerk, stock boy or girl, salesperson, head of marking room.

\$12.00 to \$16.00.

10% to 20% discount on all purchases in store.

About 8 hours.

Previous to Thanksgiving to Christmas, April to June and special sales.

Two weeks in January, lighter in February, July, and August.

Constant for most.

No.

17 years (15 or 16 years with permit). Some stores prefer 26 or 27 years.

2 or 3 weeks.

Yes.

Adequate during certain seasons but usually increasing.

Boys and girls leaving school. Former store experience and sales people who are required to be off their feet.

Lack of interest in work; failure to appreciate opportunities; lack of observation and accuracy, resulting in wrong information on tickets or wrong tickets on merchandise, and half closed pin-tickets that drop off.

**MESSENGER BOY**

Boy on specials delivers goods which purchaser insists must be had before the next regular trip of the delivery wagon can bring them. Acts as special delivery messenger for a rush order. (In some cases does the following also: delivers telegrams and store notices; gives telephone messages; carries notices to and from different offices, etc.; takes time cards to superintendent's office; carries goods to and from offices and departments as requested. Upon request escorts customer from one department to another; carries packages to customer's machine. Brings wheel chair if needed for customer.)

All work is valuable in giving general insight into the opportunities in various departments.

None.

None.

None inside, traffic risks outside.

Elementary and preferably in intermediate.

Store rules and regulations, policy and organization. Local geography.

None.

Quickness, accuracy, courtesy willingness to serve, coolheadedness, good disposition, keen observation, neatness, strength, health, steadiness.

**WAGON BOY OR JUMPER**

(Where this position does not exist the duties are included in those of the driver or occasionally of the helper.) With driver takes packages marked with number of their route from the bin in delivery room and sorts them according to street, then by consecutive numbers. Packages are loaded into wagon or truck in order sorted, except that heavy and bulky articles go in first. A separate list of these is made out. At times jumper may be sent with an armful of parcels to deliver and meets driver further along the route. Represents the store at customer's door. (Also does delivering of special packages and messenger work in stores not having messengers.)

Possibility of promotion to helper.

None. (No heavy packages handled by boys.)

None.

Traffic risks. Long hours and cold work in winter.

Elementary and preferably in intermediate.

Local geography; names, location, and intersection of streets, numbers at cross corners. Valuable to know stacking and routing of load.

None.

Ability to read names and addresses readily and make change, courtesy, neatness, cleanliness.

**MESSENGER BOY**

Systematic instruction in duties.

Knowledge of city.

Skill in handling packages given by practice.

Entirely.

Wrapper, cashier, marker, stock boy or girl, jumper, salesperson, sheet writing, shipping in minor capacity, charge of shipping.

\$8.00 to \$12.00. Occasionally \$18.00.  
10% to 20% discount on all purchases in store.

About 8 hours.

Between Thanksgiving and Christmas. April to June, and during special sales.

February, July, and August.

Constant for most. Extras for busy season.

No.

16 to 18 years (permit if 16 years unless after school hours.)

Relatively short period, depending on complexity of store organization. 2 months in largest stores.

Yes.

Steady and increasing slightly.

Boys leaving school. Promotions.  
Boys after school hours.

Lack of interest; short memory; too much play.

**WAGON BOY OR JUMPER**

Instruction more or less incidental.

Knowledge of city. Stacking and routing.

None.

Entirely.

Helper. Sometimes to driver (or chauffeur.)

\$8.00 to \$14.00

10% to 20% discount on all purchases in store.

About 8 hours.

Between Thanksgiving and Christmas. April to June, and during special sales.

February, July, and August.

Constant for most.

No.

17 years (15 or 16 years with permit.)

One week up, usually longer.

Yes Always a surplus.

Increasing slightly.

Boys leaving school. Boys going to school and working part time.

Lack of interest; short memory; too much play.

**HELPER**

Aids the head shipper in packing, lifting, wrapping, etc. Aids drivers on furniture delivery and delivery of other heavy merchandise only. (Stores that do not have wagon boys send helpers on wagons at times.)

Possibility of promotion to driver.

Physical strain from handling heavy merchandise where electrical or mechanical devices are not used.

None.

Often basement work for those on inside.

Elementary and preferably in intermediate.

No special training.

Handling and packing boxes, furniture, etc.

Alertness, strength, and activity.

**DRIVER OR CHAUFFEUR**

Next to salesperson has greatest direct contact with customers and therefore in similar degree determines the reputation of the store for service. Either drives a horse or runs a motor. Responsible for COD's. With help of jumper stacks load. Checks off load. In some stores the driver is bonded, but this is not true of all stores.

Possibility of promotion, but progress is very slow.

Sometimes lifting heavy packages at customer's door involves physical strain. Nervous strain from constant driving. Moral responsibility because of large sums C. O. D. money carried.

None.

Exposure to weather and traffic in general. Long hours and cold work in winter. Liability to personal injury because of hold ups.

Elementary and preferably in intermediate.

Drive horse or run motor. May have to take care of horse or machine. Traffic regulations. Stacking and routing. Streets of the city. Acquaintance with shipping work. Make change, make out reports, etc.

Drive horse or run motor.

Quickness, accuracy, method, courtesy, honesty, ability to meet emergencies, speed, tenacity, capacity for hard work and long hours, tact.

**HELPER**

Instruction more or less incidental.

Knowledge of packing methods.

Packing and handling merchandise.

Entirely.

Sometimes to driver (or chauffeur.)

About \$30.00 in large stores.

10% to 20% discount on all purchases in store.

About 8 hours.

Between Thanksgiving and Christmas, April to June, and during special sales.

February, July, and August.

Constant for most.

No.

20 years and up.

One week up, usually longer.

Yes.

Normal.

Men answering advertisements; inexperienced applicants; men tiding over; promotion from minor positions.

Attitude that position is only temporary. Carelessness.

**DRIVER OR CHAUFFEUR**

Individual instruction and advice.

Knowledge of city. Stacking and routing. Traffic regulations.

Handling car or driving horse.

Driving car or wagon outside. Stacking and routing learned in the store.

Few opportunities in department. Superintendent of delivery.

\$31.50 to \$40.50 in some large stores.

10% to 20% discount on all purchases in store.

About 8 hours but sometimes more.

Between Thanksgiving and Christmas, April to June, and during special sales.

February, July, and August.

Constant for most.

No.

No specified age. Some stores prefer 21 years and married men.

One month up.

Supply not always adequate to meet the demand.

Increasing slightly.

Experienced applicants secured by advertising; shop trained men, tool makers, machinists, who want this work.

Failure to realize importance of work as related to sales and business building.

**SHIPPING CLERK**

(This includes the work of head shipper and head of delivery department.) Must be capable of assuming complete responsibility for the purchase of equipment, for the organization of a department to operate that equipment efficiently, and for the selecting and training of personnel. Must see that equipment is properly maintained and kept on the road. Provides efficient routing and scheduling and installs proper methods to reduce loading and unloading delays to a minimum.

Stimulation that comes from being the head of a vitally important department.

Nervous strain caused by: necessity for operation at low cost, liability of motor accidents, break down, etc., incessant demand for extra service, and meeting unexpected rush peaks.

None.

None.

Intermediate. The more education the better able to organize work, etc.

Perfect knowledge of city and all departments of store.  
Keeping records.

Expert packing.

Integrity; ability to handle and deal fairly with many men. Executive ability; mechanical knowledge; ability to manage and co-operate; good judgment of values and people.

**AISLE OR BOOTH GIRL**

Kind of merchandise handled changes almost daily and is representative of many departments. Most of the customers are the casual shoppers. Success in this department depends on right approach and tact. Keeps record of sales for each department on separate tallies. Operates cash register in some stores. Starts at rush seasons. Makes booth or counter attractive the evening before goods are brought to the counter. Assists customer in selecting, makes sales, makes out sales slip, sends goods with money to inspector or wraps goods and makes change herself.

Opportunity to know merchandise. New and attractive goods. Variety of work. Discriminative judgment of customers and suggestive selling. Contact with all classes and types of customers. Training through knowledge of merchandise, values and styles.

Nervous strain during rush hours and from demands of impatient customers. Necessity in some stores of keeping books and tallies and operating cash register. Long hours of standing.

None.

Basement work not always satisfactory because of poor ventilation or dampness from washed air.

Intermediate or in high school.

Prices, sizes, styles, etc., of the merchandise. Sales slips and elementary points of making sale.

Handling goods carefully and quickly. Knowledge of wrapping and operation of cash register in some stores.

Interest, aptness, enthusiasm, optimism, obedience, honesty, loyalty to firm, courtesy, good health, good appearance, patience, memory.

### SHIPPING CLERK

None of a systematic nature.

Handling men.

Packing and handling merchandise.

Entirely.

Slight opportunity for promotion.

Run into the thousands in large stores but requires long experience.  
10% to 20% discount on all purchases in store.

About 8 hours but sometimes more.

Between Thanksgiving and Christmas, April to June, and during sales.

February, July, and August.

Constant for most.

No.

Man of mature years.

3 months to a year.

Open field due to the rapid development of the motor vehicle.

Increasing.

Promotion from driver; applicants from other stores.

Carelessness in checking and routing work.

### AISLE OR BOOTH GIRL

Incidental in many places, altho in some large stores regular classes are formed and definite classes organized.

Some information about stock, store procedure and regulations, including sales slips and rudiments of salesmanship.

Deftness in handling goods.

Entirely.

Salesperson. Just as other salespeople, head of stock, assistant buyer, buyer, etc.

Generally flat wage is between \$10.00 and \$25.00.

"Spiffs," prize money, etc., for moving slow selling mdse. and oversales.

About 8 hours.

Between Thanksgiving and Christmas, April to June, and during special sales.

February, July and August.

Constant for most.  
Extras for busy season.

No.

17 years (15 or 16 years with permit).  
18 years minimum in some stores.

One week to 2 months.

Yes.

Increasing.

Girls leaving school. Those rising from minor positions or coming from other stores. Inexperienced people.

Lack of interest. Failure to appreciate opportunities. Insufficient knowledge of merchandise. Disobedience to rules. Lack of training in elementary arithmetic, spelling and writing. Lack of personality.

**SALESPERSON**

Salesperson is a representative of the firm to the customer and largely determines the success or failure of the store by determining merchandise turnover, service, and the reputation of the store. Keeps counter space in order and arranges and takes care of stock. Assists customers in making selections. Answers questions, gives directions. Makes sales, makes out various kinds of sales slips. Gets floor manager's O. K. on irregular transactions. Reports to buyer movement of stock. Sends sales slip with money and goods to inspector. Counts back change and gives it with parcci to customer. Sends sales slip with money and goods to inspector or sends money and check up tube. (In some stores salesperson operates cash register and wraps merchandise, etc. Takes weekly and yearly inventories, etc.)

Meeting and sizing up people. Knowledge of stock and materials. Salesmanship instruction in some stores, history of merchandise and its manufacture, stimulating sense of color, texture. Opportunities for advancement.

Nervous strain during rush hours and from incessant demands of customers. Long hours of standing. Responsibility of handling money and operating cash register where used.

None.

Basement work not always satisfactory because of poor ventilation or dampness of washed air.

Intermediate. High school preferred by some of the largest stores.

Must know stock as to kind, variety, quality and values of merchandise, position on shelves or in dept. as well as in reserve. System of sales slip for handling all kinds of sales. Know store well enough to direct customers. Must know approach and all other elements of a sale. Display stock. Amount of material required for finished article.

Showing and presenting merchandise. Measuring and handling goods. Operating cash register in some stores. Courtesy, good will, good taste, personality, memory, good eyesight and color sense, neatness, honesty, accuracy, ambition, originality, ability to co-operate and follow directions.

**HEAD OF STOCK**

Keeps close watch upon the reserve stock so as to be sure that the supply is always in right proportion to the demand. Takes care of stock in the department. Performs the duties of a salesperson in some stores. Often serves as an assistant to a buyer. Keeps the buyer advised as to the demands of the public.

Opportunity to gain thorough knowledge of merchandise and demands of public, thus qualifying for promotion to buyer.

Nervous strain from responsibility of position.

None.

None.

Intermediate.

Kinds, qualities, amounts, values of stock in department. Details about kinds, quantities and manufacture. Knowledge of salesmanship.

None.

Accuracy, neatness, and system.

**SALESPERSON**

Instruction in system. Definite salesmanship instruction given individually and in groups in the largest stores.

Kind, variety, etc. of merchandise. Store procedure and regulations. Principles of salesmanship if work is intelligently done.

Deftness in handling goods, displaying stock, and operation of cash register (where used), etc.

Entirely, but study of salesmanship a great aid.

Head of stock, assistant buyer, buyer.

Generally flat wage is between \$12.00 and \$25.00.  
"Spiffs," prize money, etc., for moving slow selling mdse. and oversales.

About 8 hours.

Between Thanksgiving and Christmas, April to June, and during special sales.

February, July, and August.

Constant for most.

Extras for busy season.

No.

17 years up. 18 years minimum in some stores.

One week to 2 months.

Supply not always adequate.

Increasing.

Those rising from minor positions or coming from other stores. Inexperienced people. Married women.

Lack of interest; failure to appreciate opportunities. Insufficient knowledge of merchandise; disobedience to rules. Lack of general education.

**HEAD OF STOCK**

Individual instruction and advice from merchandise managers.

Thorough knowledge of stock.

None.

Entirely.

Assistant buyer, buyer.

Wage a little better than that of salespeople.  
10% to 20% discount on all purchases in store.

About 8 hours.

Between Thanksgiving and Christmas, April to June, and during special sales.

February, July, and August.

Constant for most.

No.

20 years or over. Usually a man of mature years.

6 months to a year in department.

Yes, but positions are not adequately filled in many cases.

Gradually increasing.

Those who have risen from minor positions.

Lack of system, method and memory.

---

**BUYER**


---

The buyer is the most important cog in the organization inasmuch as he is responsible for the securing of trade and the making of profit, but to get his results he is dependent on the service to build up the trade and turn the merchandise. The buyer has control over the physical layout and the merchandise of his department or departments. He determines amount and kind of goods to be purchased for his department, including replacing of stock and selecting new lines, being apportioned a yearly amount upon which to finance his department. Checks up goods received. Attends to the details of price setting and marking of goods. Studies and interprets demand and sale. Makes daily report of business to merchandise office. Arranges for sales and mark downs in his department. Sees to advertising goods in his department. Acts as salesman in his department when advisable. Requisitions help and sizes up salespeople in his department or departments.

---

Fast turning of merchandise. Trading. Travel. Always being ahead of the time. Competitive methods of others. Desire to be first with something new or novel. Selecting attractive and salable articles. Opportunity to develop and grow.

Nervous strain involved in the responsibility of gambling with large sums of money. Necessity for satisfying the firm and the public. Uncertainty of depending upon weather conditions and the whims of the public.

None.

None.

---

Intermediate, preferably high school. The more education the better for this position.

How to interpret and study demand and sales. Details of manufacture of stock—raw materials, process, changes made in product. Knowledge of salesmanship. Know buying power and "tastes" of locality, permanence of earning power of community, etc. Understanding of human needs and human nature. Knowledge of figures—the relation of stock to sales and purchases to turnover; what it means to make a profit and the factors that enter into it.

None.

Foresight—anticipation of market, executive ability, capacity to lead, teach and co-operate, good memory, health, gambling instinct, level headedness, accuracy, ability to analyze sales and results of the previous year, recognition of the importance of the selling force and service in merchandise turnover, capacity for hard work and system, as detailed and accurate records must be kept.

---

**BUYER**

---

Individual instruction and advice from merchandise managers.

Thorough knowledge of stock. Some understanding of group psychology. Ability to foresee future conditions through a study of the present.

None.

Entirely.

Manager, merchandise manager, general merchandise manager, member of the firm, own their own store.

---

Wages very good. (Run into thousands in large stores.)

Drawing account. 10% to 20% discount on all purchases in store.

---

About 8 hours, but extra time is needed.

---

Especially busy during March and September and in the largest stores during three months of each half year, but also busy preparing for the busiest season during remaining time.

No real slack season.

Constant for most.

---

No.

---

Not under 25 years.

---

2 years and up.

---

---

Yes.

---

---

Increasing.

---

---

Those who have risen from minor positions or who come from other stores. (The number of college trained people going into this work is increasing constantly.)

---

Lack of industry and some of the essentials mentioned in section 3.

**FLOOR MANAGER**

The floor manager has full control over the personnel of his department, the discipline, the appearance, and service rendered. He supervises a number of sections. Takes responsibility from and has certain authority over those on floor. O. K.'s irregular sales slips, signs shopping permits, etc. Regulates tide of business; enforces general rules. Directs customers and sees that they have attention. Acts as adjuster between salesperson and customer. Usually represents store superintendent.

Adapting to varied personalities; demand for quick judgment; possibility of promotion in so many lines.

Nervous strain from rushes, shortage of help, errors, unreasonable demands of customers, etc.

None.

None.

Intermediate, preferably high school.

Store's procedure in unusual cases. Policy of store, departments, and merchandise sections. General knowledge of the stock in his territory. Must keep in touch with all changes and additions. Knowledge of goods and taste in displaying them. A thorough knowledge of system, cash register, and store directory.

None.

Good presence, tact, resourcefulness, understanding of workers under him, ability to meet emergencies and anticipate needs, organizing ability.

**MANAGER, SUPT.**

Merchandising executive. Directs the buying and selling of merchandise through buyers and heads of departments. Advertising manager and display men are responsible to him. Determines kind and amount of merchandise store carries and division among departments, and the advertising policy to be used by the store. Handles finances of the allied departments.

Stimulation and interest that comes from directing the varied lines of store organization.

Responsibility of directing business at a profit causes some nervous strain.

None.

None.

Preferably high school. The more education the better.

Knowledge of figures—the relation of stock to sales and purchases to turn over; what it means to make a profit and the factors that enter into it.

None.

Good memory, gambling instinct, level-headedness, accuracy, ability to analyze sales, executive ability with capacity to lead, teach and co-operate.

**FLOOR MANAGER**

Thorough instruction in system, cash register, adjustments, directory, organization, service, policy and ideals of the store.

Knowledge of merchandise. Store procedure and regulations. Dealing with people.

None.

Entirely.

Buyer, superintendent of floor, superintendent of floor managers, adjustment bureau, etc.

About \$40 a week.

10% to 20% discount on all purchases in store.

About 8 hours.

Between Thanksgiving and Christmas, April to June, and during special sales.

February, July, and August.

Constant for most.

No.

30 years up. Usually middle aged.

From 3 to 6 months.

Yes.

Decreasing in some stores.

Those who have risen from minor positions or have had service or sales experience or executive positions.

Lack of general education; lack of sense of responsibility, lack of vision and recognition of avenues of promotion.

**MANAGER, SUPT.**

None of a systematic nature.

Thorough knowledge of stock. Understanding of group psychology. Ability to foresee future conditions through a study of the present.

None.

Entirely.

General merchandise manager, member of the firm, own their own store.

Usually from about \$7,000 up.

10% to 20% discount on all purchases in store.

About 8 hours, but extra time is needed.

Between Thanksgiving and Christmas, April to June, and during special sales.

No real slack season.

Constant for most.

No.

Not under 25 years.

From 2 years up.

Always an opportunity for men with proper qualifications.

Increasing.

Advertising men and buyers.

Failure to turn stock fast enough; failure to keep stock complete.



# CHAIN GROCERY STORE OCCUPATIONS

This investigation was conducted by H. B. Lamport in co-operation with the Vocational Information Division of the Vocational Bureau.

## TABLE OF CONTENTS

| Occupation    | Pages  |
|---------------|--------|
| TYPE I STORE  |        |
| Clerk .....   | 24, 25 |
| Manager ..... | 24, 25 |
| TYPE II STORE |        |
| Clerk .....   | 26, 27 |
| Manager ..... | 26, 27 |
| Butcher ..... | 26, 27 |

**CLERK**

Wrapping, and sacking goods; cleaning store; putting away stock; waiting on customers during busy hours; making change; doing occasional errands outside store for manager.

Meeting new people, and dealing with public in general. Trying to sell goods not asked for.

Long hours, if working as full time clerk. Standing up, and walking about store. Nervous strain at times from dealing with peculiar customers.

Lack of ambition where one remains too long in store.  
No particular occupational diseases.  
Occasional straining when lifting boxes, etc.

8th grade sufficient, high school preferred.

No technical education.

Quickness, and skill in handling packages. Lack of clumsiness.

Accuracy, honesty, good personal appearance, neatness, orderliness, good manners, tact.

**MANAGER**

Responsible for store. Orders goods, checks them when delivered. Waits on customers. Hires own help, and is responsible for their service. Makes reports to superiors as required.

Chief interest in making store attractive and profitable. Many opportunities for practicing salesmanship.

Long hours, especially on Saturday. A great deal of walking and standing. More physical than mental strain. Occasional worries regarding customers' complaints, and perishable goods.

Routine work apt to lead one to become self satisfied.  
No particular diseases. Some heavy lifting, possibly causing hernia.

8th grade sufficient, high school preferred.

None.

Speed and skill in wrapping and handling packages.

Accuracy, honesty, good personal appearance, neatness, orderliness, poise, good manners, tact in dealing with customers, patience, ability to sell.

**CLERK**

When clerk is believed good prospect for manager, he is placed with high class manager for instruction for a month.

General improvement through experience.

Must be able to add quickly and accurately.

Practically all of the work is learned in the store.

Clerk to manager to supervisor to city superintendent or manager.

Depending upon time put in. Varies from \$2.50 for part time to \$15 to \$25 for full time.

7 a. m. to 8 p. m. (13 hours).  
7:30 to 6:30 (10 hours).

Busy days Saturday. Part time work usually after school and Saturday.

None.

All the year job.

No.

Usual minimum age 15 years. Full time clerks average from 18 to 50 years.

From a week to a month according to ability.

No. Always vacancies.

Yes. New stores continually being opened.

Friends of employees. Hearsay. Chance applications.

Egotism, laziness, overbearing manner, dishonesty, slovenliness, impoliteness, clerks always asking to get off.

**MANAGER**

None except through advice of supervisor.

General improvement through experience.

Speed and accuracy in addition essential. Legible writing.

Practically all work is learned in the store.

Managers shifted to larger stores paying more salary, then to supervisors and managers.

\$20 to \$30 a week and 1% of gross sales, which amounts to \$5 to \$25 extra. Clerk hire in manager's family.

7 a. m. to 8 p. m. or 7:30 to 6:30 with hour off.

No busy season. Busiest time of day after 4 p. m. and on Saturday.

None.

Steady employment.

No.

18 years in a few cases, usually 21 years, married men preferred.

From a month to three months, according to ability. One month under a good manager required before clerk gets store for himself.

Not quite at present.

Yes, especially since business has improved and men are going into industry again.

Clerks employed. Applications from outside storekeepers of experience. These must act as clerks for a month.

Dishonesty. Inability to get along with public. Lack of neatness. Indifference. Too many managers consider job temporary. Failure to sell firm's own goods.

**CLERK**

Wrapping and sacking goods; cleaning store; putting away stock; waiting on customers during busy hours; making change; doing occasional errands outside store for manager. Clerks hired by central office rather than by the store manager.

Meeting new people, and dealing with public in general. Trying to sell goods not asked for.

Long hours, if working as full time clerk. Standing up, and walking about. Nervous strain at times from dealing with peculiar customers.

Lack of ambition where one remains too long. No particular occupational diseases. Occasional straining.

8th grade sufficient, high school preferred.

No technical education.

Quickness, and skill in handling packages. Lack of clumsiness.

Accuracy, honesty, good personal appearance, neatness, orderliness, good manners, tact.

**MANAGER**

Has general charge of store, except the butcher, who is directly responsible to the company. Does not hire own clerks, but has charge of them. Waits on trade. Orders stock, and makes reports to company through supervisor.

Long hours, especially on Saturday. A great deal of walking and standing. More physical than mental strain. Occasional worries.

Chief interest in making store attractive and profitable. Many opportunities for practicing salesmanship.

Routine work apt to make one self satisfied.

No particular diseases. Some heavy lifting, possibly causing hernia.

8th grade sufficient, high school preferred.

None.

Speed and skill in wrapping and handling packages.

Accuracy, honesty, good personal appearance, tact, patience, ability to sell firm's products.

**BUTCHER**

Orders meats, and sells them to trade. Keeps his section of store in order. Cleans ice box, and fixtures. Takes weekly inventory. Makes reports as required. Is entirely independent of grocer, and is subject to separate supervisors.

Long hours. Physical strain when lifting heavy pieces of meat. Strong man required. Mental strain greater than grocer.

Meeting new people, and dealing with public in general. Trying to sell goods not asked for.

Routine work apt to make one self-satisfied.

No particular occupational diseases.

Eighth grade sufficient, high school preferred.

Knowledge of cuts of meat, their food and money value. Principles of sanitation and refrigeration. How to make lard, sausage, and similar products.

Cutting meats, keeping knives in order, wrapping packages, etc.

Accuracy, honesty, good personal appearance, neatness, orderliness, good manners, tact.

| CLERK                                                                                                           | MANAGER                                                                                                       | BUTCHER                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Clerks given a course of training in large market stores before being assigned to local stores.                 | None except through advice of supervisor.                                                                     | None.                                                                                                          |
| General improvement through experience.                                                                         | General improvement through experience.                                                                       | Improved methods of meat cutting and making meat products.                                                     |
| Must be able to add quickly and accurately.                                                                     | Accuracy in addition essential. Legible writing.                                                              | Skill in cutting meat. (See clerk.)                                                                            |
| Practically all of the work is learned in store.                                                                | Practically all work is learned in the store.                                                                 | Continually learning ways to save poorer cuts.                                                                 |
| Clerk to manager to supervisor to city superintendent or manager.                                               | Managers shifted to larger stores paying more salary, then to supervisors, and managers.                      | None in these stores. Must hope for increased wages, or transfer to larger store.                              |
| \$25 to \$35 a week for full time clerks. Very few part time clerks employed.                                   | \$25 to \$70 a week, based on size of store and gross sales. Salary better than in type 1 stores.             | \$35 to \$60 a week.                                                                                           |
| Hours similar to manager's for full time clerks.                                                                | From 7 a. m. to 7 p. m., or 7 to 7.30 an hour off.                                                            | From 7 a. m. to 7 p. m. or 7 to 7.30 an hour off.                                                              |
| Busy days on Saturday. Part time work usually.                                                                  | No busy season. Busiest after 4 and on Saturday.                                                              | Counter busiest in winter, other in summer.                                                                    |
| None.                                                                                                           | None.                                                                                                         | None.                                                                                                          |
| All the year job.                                                                                               | Regular employment.                                                                                           | Regular employment.                                                                                            |
| No.                                                                                                             | No.                                                                                                           | Not in these stores.                                                                                           |
| 18 years the minimum. From 18 up to 50.                                                                         | No managers under 21 years, older preferred.                                                                  | 15 to 18 as apprentices. No butchers under 21.                                                                 |
| From one to three months according to ability.                                                                  | From a month to three months, according to ability.                                                           | From 1 to 3 years according to ability and experience.                                                         |
| No. Always vacancies.                                                                                           | Not quite at present.                                                                                         | No. Factory work has drawn many butchers because of shorter hours.                                             |
| Yes. New stores continually being opened.                                                                       | Yes, especially since business has improved and men are in industry.                                          | Yes. Many resignations, and many stores being opened.                                                          |
| Friends of employees. Hearsay. Chance applications.                                                             | Clerks employed. Applications from outside storekeepers.                                                      | Errand boys learn business. Butchers secured through applications.                                             |
| Egotism, laziness, overbearing manner, dishonesty, slovenliness, impoliteness, clerks always asking to get off. | Dishonesty. Inability to get along. Lack of neatness. Indifference. Too many managers consider job temporary. | Inability to dispose of poorer cuts of meat to advantage. Lack of sanitary methods. Quarreling with customers. |



# COMMERCIAL ART OCCUPATIONS

This investigation was conducted by Alex Crockett in co-operation with the Vocational Information Division of the Vocational Bureau.

## TABLE OF CONTENTS

| Occupation                     | Pages  |
|--------------------------------|--------|
| Cartoonist .....               | 30, 31 |
| Staff Artist (Newspaper) ..... | 30, 31 |
| Illustrator .....              | 32, 33 |
| Mechanical Retoucher .....     | 32, 33 |
| Designer .....                 | 34, 35 |
| Fashion Artist .....           | 34, 35 |

**CARTOONIST**

Drawing cartoons and comics.

Opportunity to use imagination and initiative. Creative nature of work. Variety of material. Admiration coming from general public for work produced. Constant touch with wide field of thought and current events.

Confining nature of work calls for distinct change of atmosphere with some physical exertion after working hours. Eyes must be well cared for.

Easy for successful artist to fall behind. Usually does not read enough. Continual sitting posture. Use of eyes. Speed with which some drawings must be executed.

Education should be cultural, including history, literature, and the arts.

Should have enough technical education to understand fundamental principles underlying mechanics. Should know how zinc and copper etchings are made.

Skill in art class or private school. Should include life drawing, drapery drawing and pen and ink work.

A newspaper cartoonist is an editorial writer. Sometimes he contributes the idea, sometimes he brings out someone else's idea.

**STAFF ARTIST (NEWSPAPER)**

Illustrating write-ups, lay-out work, headings, retouching, mounting, etc.

Creative nature of work. Variety of material. Contact with wide field of thought, information, and current events.

See cartoonist.

See cartoonist.

See cartoonist.

General education should be cultural, Greek and Roman history, and arts.

This work calls for more emphasis on designing and decoration than does cartooning, not however to the exclusion of illustrating.

Same, excepting less emphasis on imagination and more on technique.

The young worker is inclined to overrate his ability. Hence he needs a spirit of humility plus a great deal of persistence.

**CARTOONIST**

Practically no apprenticeship opportunities with the modern newspaper; editorial cartoons cheap and larger newspapers have trained men only.

Technical knowledge of the work is continuously gained by the cartoonist. New practical problems are always confronting him.

Skill is constantly acquired.

Modern newspapers offer little opportunity for boy or girl to learn.

Promotion depends entirely upon the individual. The variable factors are talents, love of the art, training and experience.

The average good cartoonist should make from six to ten thousand. Wage depends upon the newspaper.

Usual business hours.

No fluctuation in demand.

None.

None.

No.

About 21, depending on individual.

From two to six years, depending on individual.

There is only one newspaper cartoonist employed in Detroit. There is always demand for a first-class man.

Will probably increase.

Art schools and commercial art studios.

Lack of versatility. Young workers are apt to over-estimate ability. Ability acquired if worker has persistence. Practical imagination is essential.

**STAFF ARTIST (Newspaper)**

Same.

Same.

Same.

Same.

Same.

Entire scale somewhat lower than cartoonist wage scale. Opportunity to do outside work.

Same.

Same.

None.

None.

No.

Same.

Same.

Every newspaper of any note has at least one staff artist; some have six or more.

Same.

Same.

Same.

**ILLUSTRATOR**

Drawing scenes and figures. Receiving manuscript, selecting part of it to illustrate. These parts are sometimes designated but sometimes not.

Opportunity to use imagination and initiative. Creative nature of work. Admiration coming from the general public for the work produced.

Same as for cartoonist.

Same as for cartoonist.

Same as for cartoonist.

Same as for staff artist. Emphasis on history (period design).

Same as for staff artist.

Possible to have too much art work, lessens interest in commercial art.

An illustrator may be too accurate; a mechanical man not accurate enough. Patience, observation, imagination, and alacrity are needed.

**MECHANICAL RETOUCHER**

Reproduction of mechanical objects.

Creative nature of work. Opportunity to retouch a poor picture of a beautiful subject. Variety of work.

Very detailed work involved. Calls for delicate manual dexterity.

Mechanical nature of work; i. e., sometimes objects differ only in size. Same.

Mechanical drawing and shop work should be included in course.

Technical education desirable. Worker should have first hand acquaintance with machine design.

Art school training essential. Less emphasis on life work; more on principles of design and decoration.

Worker should be mechanically inclined; should be able to tell the feel of metals; able to understand instruction.

**ILLUSTRATOR**

Apprenticeships in commercial art studios constitute best method. Work gradually given over to studio with its specialized corps of artists.

Same as for cartoonist.

Same as for cartoonist.

Occupation can be learned in studio.

Same as for cartoonist.

Apprentices receive \$12 to \$15 a week. Opportunity to do outside work. \$50 to \$125 is average; \$250 is high.

48 hours a week.

No fluctuation in demand.

None.

None.

No.

About 21 years.

From one to six years.

There is always room for good men. Supply usually is equal to demand.

The demand is not decreasing.

Art schools and commercial art studios.

Some men are good artists but not good commercial artists. A commercial artist must be able to understand another man's idea, and must adapt his work to effectiveness rather than standards of beauty.

**MECHANICAL RETOUCHER**

Apprenticeship opportunity in commercial art studios.

Same.

Same.

Occupation can be learned in studio.

Same.

Apprentices receive \$10 after 6 months; \$25 after year; \$50 to \$60 average; \$80 to \$100 good.

48 hours a week.

Same.

Same.

Same.

No.

About 21 years.

Same.

Demand a little greater than supply. "In Detroit there are not more than 5 first-class retouchers."

Increasing.

Same.

"Going to sleep on the job." Failure to check up instructions with common sense. "It takes years of patient, constant work before a man can be a first-class mechanical retoucher; ten years to a top notcher."

**DESIGNER**

Designing, decorating, lettering. Assembling units of lettering, ornamentation, sketches, etc.

Creative nature of work. Variety of material. Opportunity to use imagination and initiative. Pleasure in adjusting factors of shape, tone, and size to balance, rhythm, and harmony.

Same as mechanical retoucher.

Same as mechanical retoucher.

Same as cartoonist.

Cultural education.

Should understand the process of making zinc and copper etchings, and know how printing is done.

Art school training essential. Emphasis should be laid on principles of design.

A burning desire to draw is more essential even than native talent. The real artist helps himself. Lacking this desire, a boy or girl wastes time.

**FASHION ARTIST**

Sketching garments, drapes, and general merchandise in department stores. Making lay-outs for groups of figures.

Making lay-outs. Making a perfect picture.

Same.

Same.

Same.

Cultural education.

Study of garment and merchandise manufacture.

Emphasis on life work and draperies.

Natural liking for nice garments; capacity for observing details.

**DESIGNER**

Apprenticeship opportunity in commercial art studios. An acquaintance with advertising selling, and general business is very helpful.

Same as for cartoonist.

Same as for cartoonist.

Occupation can be learned in a studio.

Same as for cartoonist.

Apprentices receive \$30 a week after 5 years. Average wage is about \$3000. Opportunity to do outside work.

48 hours a week.

No fluctuation in demand.

None.

None.

No.

About 21 years.

From 9 months to 2 years.

Demand for good designers exceeds supply.

Increasing, at least for the next generation.

Art schools and commercial art studios.

Narrowness. Too often a letter artist can't design. Ability to grasp another's ideas and picture them. Lack of energy, and lack of culture are common faults; also a lack of advertising and selling experience.

**FASHION ARTIST**

Opportunity to serve as apprentice fashion artist in department store after securing art school training.

Same.

Same.

Occupation cannot be learned without fundamental training in art.

Same.

Lowest wage \$16 a week; average \$45; highest, \$75.

Same.

Same.

Advertising campaigns generally start in September; hence July and August.

Same.

Same.

No.

About 21 years.

At least six months in addition to full art school training. Depends largely upon individual.

Yes. There are plenty of fashion artists. Cheap drawings frequently get into print.

Static.

Art schools.

Failure to understand structure of body. Fashion artists generally are women—more interested in garments. Poor drawings are identified by lack of facial expression (character), grotesque postures, and poor lay-outs.



# DRAFTING ROOM OCCUPATIONS

This investigation was conducted by Frank R. Kepler, Roy E. Sprague, and Ernest R. Hoppe in co-operation with the Vocational Information Division of the Vocational Bureau.

## TABLE OF CONTENTS

| Occupation             | Pages  |
|------------------------|--------|
| Blue Print Worker..... | 38, 39 |
| Tracer .....           | 38, 39 |
| Detailer .....         | 40, 41 |
| Lay-out Man .....      | 40, 41 |
| Checker .....          | 42, 43 |
| Designer .....         | 42, 43 |

---

**BLUE PRINT WORKER**

---

Makes blue prints.  
Cares for machine.  
Sometimes files tracings.  
Often does some tracing.

---

Coming in contact with drawings and interest in their use may be an incentive to advance to tracing and detailing.

Intense light of blue print machine may injure eyes.

None.

None.

---

Ordinarily an eighth grade education is required.

None.

Be able to run and care for the blue-print machine, make minor adjustments, feed machine, replace used roll of paper with a new one.

Must be quick, alert, able to follow directions, economical of blue print paper.

---

**TRACER**

---

Traces penciled drawings in ink on transparent paper or cloth.

---

Advancing to position of detailer.

Leaning over the board and continuous sitting position from day to day with eye strain tends toward nervousness.

None.

Eye trouble.

---

High school graduate preferred.

Know relation between mechanical drawing views. Familiarity with conventions and symbols. Ability to do accurate and rapid free-hand lettering.

Must be able to use skillfully all drawing materials and instruments with fair speed.

Must be accurate, neat, quick, patient. Also must follow directions intelligently.

**BLUE PRINT WORKER**

Given an opportunity to make tracings and do some detailing under instruction.

None.

Mainly skill in making prints, by machine.

Many concerns offer opportunity to learn tracing and detailing.

To tracer or detailer.

\$20 to \$.55 an hour.

8 to 9 hours a day.  
44 to 49 hours a week.

Practically none except in automobile industry and in building operations.

None.

None.

No.

15 or 16 years.

Approximately one month.

Supply is adequate.

At present time increasing.

Office boys.

Carelessness.

**TRACER**

Apprentice courses, lectures, work under guidance, standard practice sheets, trips.

May become familiar with standard conventions used, dimensioning, notations, principles of drawing.

Greater skill in use of drawing instruments, improvement of quality and speed in technique.

Can be learned entirely on the job.

To detailer or lay-out man.

\$25 to \$.75 an hour.

8 to 9 hours a day or 44 to 49 hours a week.

Same.

None.

None.

No.

16 to 18 years.

Three to six months.

Yes.

Same.

Office boys, blue print boys, secondary and continuation schools, advertisements, employment bureaus.

Failure to make neat drawings, poor letterers, lack of technique, inattention to details.

**DETAILER**

Makes detail drawings of parts of machines, tools or fixtures from sketches or from assembly drawings.

To advance to layout man, checker, or even designer.

Same as those of the tracer.

None.

Eye trouble and nervousness.

At least two years of high school training, including technical subjects.

Know relation between mechanical drawing views, conventions, and symbols, be familiar with stock materials, tools of standard sizes, shop terms and practices, general principles of dimensioning and notation.

Must be able to use all drawing materials and instruments skillfully.

Must be accurate, neat, alert, needs to follow instructions and designs.

**LAY-OUT MAN**

Makes a large lay out or drawing of designs sketched by the designer.

To advance to position of checker or designer.

Same as those for tracer and detailer.

None.

Eye trouble and nervousness.

Two years high school or equivalent; preferably technical graduate.

In addition to that of detailer, he should understand mathematics and mechanics, and the principles of strength of materials; be familiar with reference books and catalogs.

Must be able to use all drawing instruments and materials skillfully.

Must be alert, deliberate, and able to follow designs closely and intelligently.

**DETAILER**

Apprentice courses, lectures or designs, work under guidance, standard practice sheets, trips.

Becomes familiar with lay-out work and general design, shop requirements.

Greater skill and efficiency in following out designs from field experience.

Can be learned almost entirely on the job.

To checker or designer.

\$45 to \$1.30 an hour.

Same as tracer.

Same as blue print worker.

None.

None.

No.

17 years or over.

At least one year.

Yes.

Increasing.

Tracers, schools having technical courses, advertisements, employment bureaus, engineering schools.

Lack of practical experience, inaccuracy in figures, inattention to minor details.

**LAY-OUT MAN**

Lectures and conferences on designs, trips in the field or shop.

Familiarity with jobs and construction processes and practices.

Greater skill and efficiency in following out designs from field experience.

Can be learned almost entirely on the job.

To checker or designer.

\$50 to \$1.30 an hour.

Same.

Same.

None.

None.

No.

18 years or over.

Two years or more.

Yes.

Same.

Detailers, colleges and engineering schools, advertisements.

Lack of practical experience, lack of proper combination of theory and practice.

**CHECKER**

Examines all drawings for accuracy of detail, dimensions, finish, heat treatment, clearances, etc.

Big opportunity for advancement to engineer or superintendent.

Same as for tracer, with strain of added responsibility.

None.

Eye trouble, and nervousness from additional responsibility.

Generally are 50 to 100% technically trained.

Corresponds to that of lay-out men; should have been a detailer, lay-out man or tracer.

None required in actual checking.

Must be alert, critical, accurate. Needs to take in details at a glance.

**DESIGNER**

Works out the idea of the engineer from the standpoint of practical design, and possibilities of production within the plant.

Seeing his designs and suggestions worked out in practice, and opportunity for advancement in his own line or to engineer of plant.

Same as for checker.

None.

Same as for other drafting room workers.

Graduate of higher technical or engineering school, or equivalent.

Must be an experienced draftsman. Must understand advanced projecting, trigonometry, mechanics, strength of materials, and theory of design. Should have shop or field experience.

Requires skill of an experienced draftsman.

Originality.

**CHECKER**

Conferences with chief-draftsman, designer and engineer.

Same as for lay-out man.

Greater skill and rapidity in detecting errors.

Acquires considerable skill in checking errors in drafting.

To designer of chief-draftsman.

\$.90 to \$1.50 an hour.

Same as tracer.

Same as blue print worker.

No.

22 years or over.

Three years or more.

Yes.

Increasing.

College graduates, detailers, lay-out men.

Inattention to minor details, carelessness, lack of practical experience.

**DESIGNER**

Conferences with chief draftsman and engineer, trips to various parts of plant or field.

Various operations in plant; practical construction.

Originate practical and modern designs.

Gains additional experience in design based on schooling and practical work.

To engineer of chief draftsman.

\$.90 to \$2.50 an hour and up.

Same.

Same.

No.

21 to 25 years.

Four years or more.

Yes.

Increasing, especially for tool designers.

Graduates of engineering courses, technical schools, lay-out men or detailers.

Lack of practical experience in manufacturing methods or knowledge of conditions of production or construction.



# TOOL MAKING OCCUPATIONS IN LARGE PRODUCTION PLANTS

This investigation was conducted by George H. Snadden and James P. McGuinness in co-operation with the Vocational Information Division of the Vocational Bureau.

## TABLE OF CONTENTS

| Occupation               | Pages  |
|--------------------------|--------|
| Die Maker .....          | 46, 47 |
| Die Sinker .....         | 46, 47 |
| Gauge Maker .....        | 48, 49 |
| Jig and Fixture Man..... | 48, 49 |

**DIE-MAKER**

Making, blanking, and forming dies for adding machine, typewriter, and automobile parts.

Variety of work offered; new problems to solve.

If any not continuous.

None.

No general occupational disease or accident liability.

8th grade, preferably high school.

Read and interpret blueprints. Preparatory and advanced mathematics. Knowledge of general shop mechanics and materials. Names, care, and uses of common shop tools and machines.

Operation of all standard machines, and bench work to precision limits.

Accuracy, speed, application, adaptability; good eyesight, good health; ability to visualize; steady nerves.

**DIE-SINKER**

Sinking of dies for drop-forgings, die castings, art metal work, and table ware.

Variety and types of work involved; new problems to meet.

None except caused by lack of confidence and inexperience.

None.

Tool rooms as a rule are kept clean, are well lighted and well ventilated. Machinery is well guarded.

8th grade, preferably high school.

Ability to interpret drawings. Preparatory and advanced mathematics. Knowledge of shop mechanics, materials, methods and terms used. Names, care, and uses of all machines, attachments and tools used in die-sinking.

Same as die-maker. In addition, skill in making templates and the use of routing and profiling tools.

Accuracy; good degree of intelligence; patience; physical strength; delicacy of touch; good eyesight, steady nerves.

**DIE-MAKER**

None, except where there are apprenticeship or training departments.

Application, best acquired in the plant by experience.

Speed and accuracy in all specialized operations.

In some plants entirely; others only partly.

To executive depending on ability, experience, and training.

\$ .75 to \$1.50 per hour, depending on experience, training, and service.  
Stock certificates; anniversary checks; group insurance; apprenticeship bonus.

8 to 9 hours per day; 40 to 50 hours per week.

Dependent upon general manufacturing conditions throughout country.

Same.

Employment usually steady.

No.

16 to 18 years of age.

4 years or more.

Yes, at present.

Increasing at present.

Graduate apprentices; other shops; promotions.

Lack of mechanical ability; no originality; no native ability; dissatisfaction; too slow; lack of appreciation of the value of accuracy; lack of interest.

**DIE-SINKER**

Same as die-maker.

Application, best acquired in the plant by experience.

Same as die-maker.

Same as die-maker.

Die-sinker; assistant foreman, foreman; superintendent; vice-president.

Same as die-maker.

Same as die-maker.

Same as die-maker.

Same.

Highly skilled men seldom out of work.

No.

16 to 18 years.

4 years or more.

Yes, at present.

Tendency toward increase.

Promotions within the plant; graduate apprentices; trained through apprenticeship.

See die-maker.

**GAUGE-MAKER**

Making of plug, snap, thread, and special gauges for use of inspectors and machine operators.

Variety in the work; new problems to solve.

None. Work not monotonous and little continuous repetition.

None.

Tool rooms usually kept clean, well lighted and well ventilated. Machinery well guarded.

8th grade, preferably high school.

Read and interpret blueprints. Applied mathematics and layouts. Knowledge of shop mechanics, material, and methods. Names, care and uses of machines, attachments, and tools used.

Same as die-maker. In addition, skill in grinding, lapping and other methods of obtaining exact dimensions.

Absolute accuracy; good eyesight; good health; good control of nerves and muscles; patience and care; ability to design.

**JIG AND FIXTURE MAN**

Making of drill jigs, milling machine, planer, screw machine, and turret lathe fixtures.

Variety and range of work involved; new problems to meet.

None. See die-maker, die-sinker, and gauge maker.

None.

Same as die-maker.

8th grade, preferably high school.

Thorough knowledge of drawings. Preparatory and advanced shop mathematics.

Knowledge of machines, materials used, and methods of doing work. Names, care, and uses of all machines, attachments, and tools used in the shop.

Skillful operation of all hand and machine tools to specified limits.

Accuracy, speed, originality; ability to absorb information readily; good health; ingenuity; native ability.

**GAUGE-MAKER**

None, except where there are apprenticeship or training departments.

Same as 3 (b).

Best acquired in the plant by experience.

In some plants entirely, others only partly.

Machinist; gauge maker; assistant foreman; foreman; superintendent; vice-president.

Same as die-maker.

8 to 9 hours a day; 40 to 50 hours a week.

See die-maker and die-sinker.

No.

16 to 18 years.

4 years and above.

Yes, at present.

Increasing at present.

Promotions within the plant; apprentices; other shops; recruited from higher class tool makers.

Same as die-maker.

**JIG AND FIXTURE MAN**

Same as gauge-maker.

Same as 3 (b).

Best acquired in the plant by experience.

Same as gauge-maker.

Machinist; jig and fixture man; foreman; superintendent; apprentice supervisor; superintendent.

Same as die-maker.

8 to 9 hours a day; 40 to 50 hours a week.

See die-maker and die-sinker.

No.

16 to 18 years.

4 years and above.

Yes, at present.

Increasing at present.

Trade school graduates; graduate apprentices; hired and trained in company methods.

Same as die-maker.



# **OCCUPATIONS**

in

## **SHEET METAL TRADES**

This investigation was conducted by James R. Hendrickson in co-operation with the Vocational Information Division of the Vocational Bureau.

### **TABLE OF CONTENTS**

| Occupation                | Pages  |
|---------------------------|--------|
| Apprentice or Helper..... | 52, 53 |
| Journeyman .....          | 52, 53 |
| Layout Man .....          | 54, 55 |
| Estimator .....           | 54, 55 |
| Foreman .....             | 56, 57 |
| Superintendent .....      | 56, 57 |

**APPRENTICE OR HELPER**

Sorting metal, punching rivet holes, cutting stock, helping the journeymen, caring for machines, caring for fire-pots and coppers, painting, beating gutter, forming gutter hangers, and forming tin.

Takes part in construction. Given definite tasks from which he may learn the trade. Promotion is given as skill is acquired. Work varies, opportunity given to see many types of factories and jobs.

See journeyman.

None.

Cuts from sheet metal, acid getting into eyes.

Intermediate.

See journeyman.

See journeyman.

Willingness to learn.

**JOURNEYMAN**

Inside worker is employed in the manufacture of the products. Outside worker is employed in the erection and repair of jobs. The nature of work is as follows: laying out jobs from prints, cutting metal into shape, forming up jobs, riveting, soldering, seaming, and assembling.

Work started and completed by one person. Work varies, chance of advancing to estimator.

Noise of working metal, working in crowded quarters on erection jobs, working off the ground, lifting.

None.

Falling from heights, cuts, and acid burns.

Intermediate.

Knowledge of metals and their uses, tools and supplies. Mechanical drawing, mensuration, etc.

Operating machines, forming metals, laying out jobs, etc.

Accuracy, speed, interest.

**APPRENTICE OR HELPER**

Six months course given at Cass Technical School in sheet metal bench work under the supervision of the Sheet Metal Contractors Association.

See journeyman.

See journeyman.

Bench work, standard construction and supplies can be learned in the shop.

To journeyman.

---

\$0.30 to \$0.60 an hour.

Bonus of \$2.50 a week given by Association for attendance at night school.

---

50 hours a week.

---

Spring and fall.

November, December, January.

Very little.

---

See journeyman.

---

17 years (15 or 16 if allowed working papers).

---

3 to 4 years.

---

No.

---

Increasing.

---

Boys leaving school and unskilled workers.

---

Laziness, lack of interest, lack of initiative, lack of responsibility.

**JOURNEYMAN**

See apprentice or helper.

Knowledge of operations with machine and hand tools, metal gauges, wire gauges, strength of materials, ability to figure out new jobs.

Skill in working up metals, handling machines and hand tools, etc.

Entirely with proper instruction.

To layout man or foreman.

---

\$.60 to \$1.00 an hour.

Time and one half for overtime.

---

50 hours a week.

---

Spring and fall.

November, December, January.

Very little.

---

About 10%.

---

Determined by age as apprentice or helper (preferably 20 years or over).

---

3 to 4 years and up.

---

No.

---

Increasing.

---

Helpers and floaters.

---

Loitering on job, tardiness, lack of eighth grade education, few are not all-round tradesmen, floaters.

**LAYOUT MAN**

(In small shops the foremen do layout work.) Laying out work on metal, making patterns. In some shops all patterns are made on paper. Instructs workmen.

Developing of patterns interesting. Responsibility. Work is so varied that lack of interest is unusual.

Nervous strain during rush work.

None.

None.

Intermediate.

Drawing, triangulation, mathematics, use of metals and supplies, standards.

Ability to develop any kind of pattern. Trade skill.

Accuracy and speed.

**ESTIMATOR**

Salesman for shop, bids on jobs, keeps in touch with architects and building. Shop depends on his ability to supply work.

Time of work his own choice.

Competition causes some strain.

None.

None in particular.

High school.

See layout man. Salesmanship. Market conditions.

Ability to keep shop busy.

Honesty, courtesy, neatness.

**LAYOUT MAN**

Individual instruction.

See journeyman. Knowledge of methods for laying out various types of jobs.

See journeyman. Speed and accuracy in laying out.

Cannot easily be learned on job without systematic instruction.

To foreman, estimator, or superintendent.

\$0.60 to \$1.00 an hour.

Overtime.

50 hours a week.

Spring and fall.

November, December, January.

Very little.

Not ordinarily.

No particular age.

No stated time. It depends upon person.

No.

Increasing.

Tradesmen. Trade extension schools.

Lack of necessary knowledge. Few deficiencies because of careful selection for this work.

**ESTIMATOR**

None.

Ability to read plans and know building construction.

Some skill in figuring and estimating, ability to sketch.

Entirely.

Depending entirely upon the man.

\$50.00 a week.

Car furnished by company in most cases.

No stated time.

Spring and fall.

November, December, January.

Very little.

No.

No stated age.

It depends upon trade experience.

No.

Increasing.

Trade, engineering schools, etc.

Lack of proper understanding of building construction and salesmanship.

**FOREMAN**

Supervises construction of jobs, keeps time and records, in charge of stock, instructs workers, keeps work going, reads blue prints, etc.  
(See layout man.)

Developmental work and responsibility, as well as wide variation in construction and training men.

Responsibility for production. Lack of competent workers.

None.

Falling from heights, cuts, and acid burns.

High school.

Plan reading, handling men, knowledge of layout man's work.

Trade skill and ability to manage work and workers.

Patience, accuracy, neatness. Ability to handle production work.

**SUPERINTENDENT**

Duties are the same as foreman excepting that foreman usually has charge of the manufacture in the shop, while the superintendent has charge of all outside work in erection and repair.

See foreman.

See journeyman.

None.

See foreman.

High school.

See foreman.

See foreman.

See foreman.

**FOREMAN**

None.

See journeyman and layout man. System for handling routine work. Ability to break in, train and supervise workers.

See journeyman and layout man.

Learned from trade experience.

To superintendent or elsewhere.

\$0.60 to \$1.00 and up.

Bonus in some shops. No lost time during slack periods.

50 hours a week.

Spring and fall.

November, December, January.

Steady employment.

No.

No particular age.

It depends upon individual.

No.

Increasing.

Tradesmen.

Unwilling to break in and instruct workers (apprentices and others); lack of ability to handle men, to adopt system, and to control production output.

**SUPERINTENDENT**

None.

See foreman.

See foreman.

Learned from actual experience.

To greater opportunity elsewhere or to own his business.

See foreman.

See foreman.

50 hours a week.

Spring and fall.

November, December, January.

Steady employment.

No.

No stated age.

Same as foreman.

No.

Increasing.

Minor positions in trade.

Lack of familiarity with construction and erection work.  
See foreman.



# INDUSTRIAL CHEMISTRY OCCUPATIONS

This investigation was conducted by Sherman R. Wilson in co-operation with the Vocational Information Division of the Vocational Bureau.

## TABLE OF CONTENTS

| Occupation     | Pages  |
|----------------|--------|
| Helpers .....  | 60, 61 |
| Routine .....  | 60, 61 |
| Special .....  | 62, 63 |
| Research ..... | 62, 63 |

**HELPERS**

Collect samples, wash dishes, and sometimes make simple, routine tests.

In collecting samples from different parts of the plant, the helper has a chance to observe all classes of workers, and in the laboratory, he may be called upon to assist in making simple tests.

None.

None inherent in the job. Depends upon the boy.

Some danger of accident in collecting samples in certain plants.

Eighth grade and up.

None.

Very little as a rule. Some factories require helpers to run lathes or drills in taking samples of metals. Some make physical tests; this requires skill. Honesty and dependability.

**ROUTINE**

Do the control work. The work depends upon the plant. In automobile factories, they test steel, brass, bronze, enamel, coal, oils, etc. Usually each man makes the same tests day after day. For example, one man on steels runs carbon, another manganese, another sulphur, and a fourth phosphorus. This applies particularly to a large factory like Ford's. In the smaller factories, the same man makes several or all of these tests. In a rubber factory like Morgan and Wright, the work would be very different. Organic and physical chemistry would be applied. The substances tested would be rubber, cements, gums, acetone, benzole, alcohol, ether, and other organic solvents.

Conditions and materials are occasionally changing. Thinking through the chemical actions involved whenever difficulties are met will add interest and develop the worker.

No physical strain. Repetition of tests becomes monotonous.

Repetition makes the work become mechanical. Depends upon the man.

Accident insurance companies rank chemists second as risks. Explosions occur, some gases are poisonous.

Tenth grade and up. Few eighth graders work up.

Qualitative and quantitative analysis usually essential. Some require organic.

Skill in the use of balances, burettes, pipettes, thermometers, and other special apparatus is essential.

Accuracy, attention to details, promptness, speed, honesty, dependability.

**HELPERS**

Usually all that is necessary.

Not much required.

Usually learned on the job.

Entirely.

May advance to routine work, but seldom further without college training.

\$40.00 to \$60.00 a month.

Eight or nine hours.

All year.

None.

Very little.

No.

17 to 45.

Two weeks and up.

Yes.

Increasing slightly.

Eighth grade, and boys from other departments.

Shiftlessness, laziness, etc.

**ROUTINE**

Some factories give a short school course to college graduates in the special methods employed in their plants.

In special cases green men have been taught to do routine work, but in the great majority of cases experienced chemists are required.

Some factories train helpers or messenger boys for routine work.

Usually experienced men are required.

May advance to special or research work if college graduates, seldom without. Greatest opportunity is chance for promotion to other departments in the factory.

\$80 to \$150 a month. Some start at \$5.00 and work up to \$8.00 or \$10.00.

Eight or nine hours.

All year.

None.

Very little.

No.

18 to 45.

One to four years. Single operations may be learned in six months or less.

Yes.

Increasing slightly.

High school graduates, technical schools, and colleges.

Carelessness, irresponsibility. Habits of being late to work and in handing in reports. Lack of training. Failure to appreciate importance of detail.

**SPECIAL**

Every plant has some unusual substances to be tested, new materials come in—a competitor's products, oils, waxes, paints, waste, ores, and, in some cases, foods and drugs. The routine chemist would not know how to handle these special tests. The special chemist also looks for the causes whenever there is trouble which routine tests do not get at. He also improves factory processes and products. This work often takes him out into the plant to observe operations and to collect samples.

New samples and different products have to be analyzed. Specifications for the purchase of material have to be worked out. Each new problem met and solved develops confidence and powers of observation.

Exactng requirements of accuracy and attention to detail would be trying to one of nervous temperament.

None.

Explosions and accidental poisoning are less easy to guard against in special tests on new material than in routine work.

College graduate.

College work in quantative, organic, and physical chemistry, usually required.

Same as for routine with wider knowledge of special apparatus such as colorimeters, stills, extractors, refractonaries, polariscopes.  
Same as routine, together with initiative and self-confidence.

**RESEARCH**

Develop new products, and new processes. This work is the most difficult and the most interesting. Some firms employ college men after graduation and keep them in universities working to develop new products or to improve processes of manufacture.

Developing new processes and new products, improving old methods, searching out causes of trouble serve as constant stimuli to thought.

Uncertainty of getting results. May work a year without really accomplishing anything tangible.

None.

Some research workers have lost their eyes, some have lost fingers or hands, and others have been poisoned. The danger, however, is not very great.

College and one or two years post graduate work.

Same as special with one or two years extra advanced work in the specialty.

Same as "special," with higher degree of skill in the construction and use of special apparatus needed.

Originality, self-confidence, responsibility, reasoning ability.

**SPECIAL**

Instructions as to special methods are given by head chemist.

A broad scientific training is required as a foundation.

Experienced men are required.

Special applications may be learned on the job.

May go into research work, become head of department, or even superintendent, if qualified:

\$175.00 to \$250.00 a month.

Eight or nine hours.

All year.

None.

Very little.

No.

21 to 45.

Four to six years beyond high school.

Yes.

Little change.

College graduates with scientific training, with experience in other plants.

Lack of sufficient scientific training.

**RESEARCH**

Some plants employ college graduates to do research work in the university under their direction.

See "Special."

See "Special."

Must be highly trained before taking up this work.

Same as special. Greatest opportunity would be to start in business for self.

\$200.00 and up a month.  
Special cases receive \$5,000.00 a year.

Eight hours up.

All year.

None.

Very little.

No.

22 to 45.

Five to six years beyond high school.

Yes.

Little change.

College graduates with post graduate work in science, and experienced men from other factories.

Lack of initiative and lack of responsibility.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

## TEXTILE OCCUPATIONS

### Power Machine Operators

This investigation was conducted by Julia P. Grant and Alice Van Dyke in co-operation with the Vocational Information Division of the Vocational Bureau.

#### TABLE OF CONTENTS

| Occupation                    | Pages  |
|-------------------------------|--------|
| Overall Makers .....          | 66, 67 |
| Garment Makers (Dresses)..... | 66, 67 |
| Fur Makers .....              | 68, 69 |
| Corset Makers .....           | 68, 69 |
| Hosiery Makers .....          | 68, 69 |
| Flag, etc., Makers.....       | 70, 71 |
| Neckwear Makers .....         | 70, 71 |
| Suspender Makers .....        | 70, 71 |

**OVERALLS**

1. Operating single needle machines.
2. Operating double needle machines; stitching of single short seams, stitching of single long seams, joining of garment and putting on pockets.
3. Operating button hole machines.
4. Operating button fastening machines.

---

Rivalry, machine work, and money received.

Noise, monotony, eye strain.

Lack of variety in work.

Light, airy room. Allowed to go and come as they like.

---

Intermediate school.

Learn how to run power machine.

Skill in different machine operations.

Older women preferred. Speed and quickness desired.

**GARMENTS (DRESSES)**

1. Operating single needle machines; stitching of single short seams, stitching of single long seams, joining of garment, finishing neck and sleeves.
2. Operating double needle machines; placing sleeves in waist, finishing neck and sleeves, placing ruffling in collar and cuffs.
3. Operating piquot or double hem-stitching machines.
4. Operating ruffler on single needle machines.
5. Operating embroidery machines.

---

Machine work and money received. Variety of materials and garments.

Concentration and eye strain.

None.

Light airy room. Machines well guarded.

---

Intermediate and high school.

Knowledge of materials and garments.

Ability to handle light materials and stitch without basting, etc.

Good, steady girl. Accuracy, speed, adaptability.

**OVERALLS**

None.

How to run power machine.

Necessary operations.

Entirely.

Increase in speed of output. Single to double needle machine.

None while learning, except rush season.

\$15 a week and up regularly.

\$25 up to \$35 for special machine.

7:45 to 4:30.

Fall and winter.

Somewhat in spring and summer.

Yes, in rush seasons the number is doubled.

Yes.

16 years and up at entrance.

25 or 30 is average age.

About 3 months.

No, not of skilled workers.

Increasing.

Advertising usually.

Lack of speed and nervousness.

**GARMENTS (DRESSES)**

Special school in rush seasons. At other times only instruction in English.

How to run power machine and handle materials.

Stitch without basting.

All, except some machine operations.

Increase in output. Single thread and needle to double and speed machine.

\$10 to \$12 a week while learning.

\$15 a week and up regularly.

\$25 and up for special work.

7:45 to 4:30.

September, January, June.

Summer.

Yes, in rush seasons the number is doubled.

No.

16 years and up at entrance.

30 and up for average worker.

2 or 3 months.

No, not of skilled workers.

Increasing.

Advertising usually.

Illiteracy. Lack of speed in manipulating materials.

| FURS                                                                                                                                           | CORSETS                                                                                                                                                                                                                                                                                                                                                                                                                         | HOSIERY                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. Operating single needle machines.<br/> 2. Stitching coarse furs.<br/> 3. Stitching on fine furs.<br/> 4. Operating special machines.</p> | <p>1. Operating single needle machines; stitching single short seams, stitching single long seams, stitching curved pieces.<br/> 2. Operating double needle machines; stitching short straight seams, stitching of curved seams, stitching over boning, stitching on garters, etc.<br/> 3. Operating zig-zag machines (double needle); stitching on lace and embroideries.<br/> 4. Operating embroidery machines (special).</p> | <p>1. Operating simple knitting machines; knitting plain, single stitch hose.<br/> 2. Operating complicated machines; knitting drop stitch, ribbed, etc., hose.<br/> 3. Operating embroidery machines (special; making clocks on hose.</p> |
| <p>Variety of kinds of furs sewed, money received.</p>                                                                                         | <p>Attractiveness of material, money received, rivalry.</p>                                                                                                                                                                                                                                                                                                                                                                     | <p>Rivalry, machine operation, money received.</p>                                                                                                                                                                                         |
| <p>Eye strain and detail of work.</p>                                                                                                          | <p>Eye strain.</p>                                                                                                                                                                                                                                                                                                                                                                                                              | <p>Noise, concentration and eye strain.</p>                                                                                                                                                                                                |
| <p>None.</p>                                                                                                                                   | <p>Monotony.</p>                                                                                                                                                                                                                                                                                                                                                                                                                | <p>Lack of variety.</p>                                                                                                                                                                                                                    |
| <p>Light, airy room.</p>                                                                                                                       | <p>Light room. Guarded machines. Nurse. Lunch-room.</p>                                                                                                                                                                                                                                                                                                                                                                         | <p>Guarded machines. Light room.</p>                                                                                                                                                                                                       |
| <p>Intermediate and high school, if possible.<br/> All related knowledge learned in shop.</p>                                                  | <p>Intermediate school.<br/> How to operate machine. Have knowledge of specialty.</p>                                                                                                                                                                                                                                                                                                                                           | <p>Intermediate school.<br/> How to operate machine. Have knowledge of specialty.</p>                                                                                                                                                      |
| <p>Very necessary on all specialized operations.</p>                                                                                           | <p>Need for having speed as well as accuracy developed.</p>                                                                                                                                                                                                                                                                                                                                                                     | <p>Need for quickness and accuracy.</p>                                                                                                                                                                                                    |
| <p>Neatness, accuracy and quickness are required.</p>                                                                                          | <p>Quickness and neatness are essential.</p>                                                                                                                                                                                                                                                                                                                                                                                    | <p>Speed is very essential.</p>                                                                                                                                                                                                            |

| FURS                                                                                                         | CORSETS                                                                   | HOSIERY                                                                                                        |
|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| None.                                                                                                        | Formerly a school, but none now.                                          | None.                                                                                                          |
| None until shop is entered.                                                                                  | How to operate machines.                                                  | How to operate machines.                                                                                       |
| Skill in different operations.                                                                               | Skill in different operations.                                            | Skill in different operations.                                                                                 |
| Entirely.                                                                                                    | Entirely.                                                                 | Entirely.                                                                                                      |
| Increase in output from less expensive to better furs, promotion to special machines.                        | Single needle to double needle. Increase in output.                       | Simple to complex machine. Speed in output.                                                                    |
| <u>\$10 a week low while learning.</u><br><u>\$25 to \$35 regularly.</u><br><u>\$35 to \$45 for special.</u> | <u>\$10 to \$12 week while learning.</u><br><u>\$15 and up regularly.</u> | <u>\$10 to \$12 a week while learning.</u><br><u>\$15 and up regularly.</u><br><u>\$20 and up for special.</u> |
| <u>7:45 to 5:00.</u>                                                                                         | <u>7:30 to 5:00.</u>                                                      | <u>7:45 to 4:30.</u>                                                                                           |
| <u>Fall and Winter.</u>                                                                                      | <u>Fall and Winter.</u>                                                   | <u>Fall and Winter.</u>                                                                                        |
| Spring.                                                                                                      | Summer.                                                                   | Summer.                                                                                                        |
| <u>Rush seasons double number of employees.</u><br><u>No.</u>                                                | <u>Rush seasons double number of employees.</u><br><u>No.</u>             | <u>Rush seasons double number of employees.</u><br><u>No.</u>                                                  |
| <u>16 and up at entrance.</u><br><u>25 to 30 for average.</u>                                                | <u>16 and up at entrance.</u><br><u>16 to 21 for average.</u>             | <u>16 and up at entrance.</u><br><u>25 to 35 for average.</u>                                                  |
| <u>About 3 months.</u>                                                                                       | <u>About 6 months.</u>                                                    | <u>About 2 months.</u>                                                                                         |
| <u>Yes, now, but not in rush seasons.</u>                                                                    | <u>Yes, now, but not ordinarily.</u>                                      | <u>Not of skilled workers.</u>                                                                                 |
| <u>Increasing.</u>                                                                                           | <u>Standing still.</u>                                                    | <u>Standing still.</u>                                                                                         |
| <u>Advertising usually.</u>                                                                                  | <u>Advertising (foreign born).</u>                                        | <u>Girls bring friends.</u>                                                                                    |
| <u>Lack of speed and neatness.</u>                                                                           | <u>Lack of speed and accuracy.</u>                                        | <u>Lack of speed and steadiness.</u>                                                                           |

| FLAGS, ETC.                                                                                                                                                                                                                                                                                                                                                          | NECKWEAR                                                                                                                                                                                           | SUSPENDERS                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. Operating single thread machines; stitching long straight seams, stitching irregular seams.</p> <p>2. Operating double thread machines; stitching long straight seams, stitching irregular and curved seams.</p> <p>3. Operating zig-zag machines (double thread); stitching on stars and emblems, etc.</p> <p>4. Operating embroidery machines (special).</p> | <p>1. Operating single needle machines; stitching straight seams, stitching curved seams.</p> <p>2. Operating double hemstitching machines.</p> <p>3. Operating embroidery machines (special).</p> | <p>1. Operating single needle machines; stitching straight long seams, joining suspenders.</p> <p>2. Operating special machines.</p> |
| <p>Rivalry, variety of work, money received.</p>                                                                                                                                                                                                                                                                                                                     | <p>Variety of work and money received.</p>                                                                                                                                                         | <p>Only money received and machine operation.</p>                                                                                    |
| <p>Eye strain.</p>                                                                                                                                                                                                                                                                                                                                                   | <p>Lack of light.</p>                                                                                                                                                                              | <p>Eye strain.</p>                                                                                                                   |
| <p>No advancement, except in increased earnings.</p> <p>Guarded machines. Light room.</p>                                                                                                                                                                                                                                                                            | <p>No advancement, except in increased earnings.</p> <p>Guarded machines.</p>                                                                                                                      | <p>No variety in work.</p> <p>Guarded machines.</p>                                                                                  |
| <p>Intermediate school and up.</p>                                                                                                                                                                                                                                                                                                                                   | <p>Intermediate school.</p>                                                                                                                                                                        | <p>Intermediate school.</p>                                                                                                          |
| <p>How to operate machine.</p> <p>Knowledge of work.</p>                                                                                                                                                                                                                                                                                                             | <p>How to operate machine, knowledge of work.</p>                                                                                                                                                  | <p>How to operate machine.</p> <p>Knowledge of work.</p>                                                                             |
| <p>Accuracy and speed for all operations.</p>                                                                                                                                                                                                                                                                                                                        | <p>Speed and accuracy in various operations.</p>                                                                                                                                                   | <p>Speed and accuracy in various operations.</p>                                                                                     |
| <p>Steadiness and neatness are required.</p>                                                                                                                                                                                                                                                                                                                         | <p>Steadiness and neatness are required.</p>                                                                                                                                                       | <p>Steadiness and neatness are required.</p>                                                                                         |

| FLAGS, ETC.                                          | NECKWEAR                                        | SUSPENDERS                                         |
|------------------------------------------------------|-------------------------------------------------|----------------------------------------------------|
| None.                                                | None.                                           | None.                                              |
| How to operate single and double needle machine.     | How to operate machine.                         | How to operate machine.                            |
| Skill in operating machine.                          | Skill in operating machine.                     | Skill in operating machine.                        |
| Entirely.                                            | Entirely.                                       | Entirely.                                          |
| Simple and complex, and special embroidery machines. | Increase in output means more money.            | Increase in output means more money.               |
| \$15 and up.                                         | \$15 and up.                                    | \$8 to \$10 while learning.                        |
| \$25 to \$45 or \$50.                                | \$25 and up.                                    | \$15 and up regularly.                             |
| 7:45 to 4:30.                                        | 7:45 to 4:30.                                   | 7:45 to 4:30.                                      |
| Fall and Winter.                                     | Fall and Winter.                                | Fall and Winter.                                   |
| Summer.                                              | Summer.                                         | Summer.                                            |
| Rush seasons double number of employees.             | Yes, in rush seasons almost double force.       | Yes, about one-half again as many in rush seasons. |
| No.                                                  | No.                                             | No.                                                |
| 18 and up at entrance.<br>25 to 30 for average.      | 18 and up at entrance.<br>30 to 35 for average. | 16 and up at entrance.<br>25 to 30 for average.    |
| 2 or 3 weeks.                                        | About 2 weeks.                                  | About 3 months.                                    |
| Not of skilled workers.                              | Yes, at present, but not in rush seasons.       | Yes, at present, but not in rush seasons.          |
| Increasing.                                          | Increasing.                                     | Standing still.                                    |
| Advertising mostly.                                  | Advertising mostly.                             | Advertising mostly.                                |
| Lack of speed. Floaters.                             | Lack of speed and skill in manipulation.        | Lack of speed and skill in manipulation.           |



## **SPECIAL SALESMANSHIP OCCUPATIONS**

This investigation was conducted by William D. Robertson and J. R. Schindler in co-operation with the Vocational Information Division of the Vocational Bureau.

### **TABLE OF CONTENTS**

| Occupation                 | Pages  |
|----------------------------|--------|
| Automobile Sales .....     | 74, 75 |
| Bonds, Stocks, etc.....    | 74, 75 |
| Automobile Insurance ..... | 76, 77 |
| General Insurance .....    | 76, 77 |
| Life Insurance .....       | 78, 79 |

**AUTOMOBILE SALES**

Canvassing.

(a) Out of doors.

(b) By telephone.

Floor men in sales rooms.

Healthful; excellent opportunity to acquire knowledge of business methods and of human nature; splendid training for supervisory work.

Failure to make good at outset.  
Turn over ranges from 10% to 50%.

None.

Slight chance of accident in demonstration.

High school desirable.  
College graduate preferred.

Not required beyond a knowledge of salesmanship pertaining to this specialty.

Ability to drive automobile, etc.

Good health; good appearance; courtesy; initiative; ambition; courage; persistence; selling experience preferred. Bond usually required.

**BONDS, STOCKS, ETC.**

To acquaint person with various securities, such as government, railways, public service, industrial, mining, municipal and foreign government bonds, as well as first mortgage bonds and acceptances.

Opportunity to study bonds, mortgages, land contracts, stocks, and acceptances.  
Analysis of different individuals.

Desire for success.  
Work under high pressure.  
Must be on the alert.

None.

Fluctuation in money market.

High school essential. College preferred. Training in business desirable.  
Thorough knowledge of securities and financial conditions.

Ability to meet and persuade prospects.

Accuracy as to statements, good memory.

**AUTOMOBILE SALES**

Instruction classes in technique of selling special features of machines in question.

Technical knowledge of products given.

Junior salesmen work under the direction of seniors in some houses.

Ability to convince prospects of superiority of product.

Wholly.

Possible promotion to dealer or sales manager or other executive work in sales room or factory.

Commission only. Average income \$2,000 to \$4,000; maximum \$15,000. None.

Floor and office men work 8 hours. Canvassers work at all times.

Can be occupied to advantage throughout year.

Practically none.

Very little, excepting periods of general depression.

Not unionized.

21 years or older in the large majority of cases.

From 90 days to 6 months, depending upon individual and experience.

High grade men always inadequate.

Increasing with increasing competition in this division of salesmanship.

Experienced outside salesmen; promising applicants, though inexperienced.

Failure to organize work; lack of knowledge of human nature; lack of persistence; lack of punctuality; inattentive to details; lack of ambition.

**BONDS, STOCKS, ETC.**

Instruction and training given in interpreting different policies of companies. Each company trains regarding its own securities and methods.

Knowledge of stocks and bonds acquired.

Broad training in various aspects of business and issuing bonds.

Ability to meet persons in a business way and to be influential with them.

Wholly.

Success leads some to sales managers in branch offices and later to executive officers in company.

Salary and commission. Average \$300 a month. \$10,000 to \$15,000 high. Prizes. Premiums. Drawing account.

Time usually left to salesmen and suited to convenience of prospects.

All year demands.

January and July are busiest months.

Summer months if any.

Very little, depending upon class of securities and chance for promotion.

Local organizations only.

Not under 21 years. 25 to 45 years considered most productive period.

Depends upon individual and experience as well as nature of work, since some new phase is always arising.

Same.

Same.

All possible sources, such as salesmen of experience in other kinds of business which can offer influence of value.

Extravagance in speech; indolence in manner; lack of adaptability; failure to grasp opportunity; lack of efficiency in business matters common to all.

---

**AUTOMOBILE INSURANCE**

---

To convince owners of motor vehicles of importance of protecting their machines by insurance.

---

Analysis of policies and presenting their features convincingly.

Some nervous strain accompanies all salesmanship.

None.

Business depressions.

---

General intermediate education.  
No special training needed.

Kinds of policies and their suitability for various purposes.

Ability to meet and persuade prospects.

Correct representations.

---

**GENERAL INSURANCE**

---

To look for all kinds of insurance business.

Every person is a prospect.  
(Life insurance salesmen are not satisfied in other fields.)

---

New features and aspects of business that are constantly arising.

Uncertainty of success is a factor.

None.

None in particular.

---

High school essential.  
College training preferred.

Knowledge of details of policies for each kind of insurance sold.

Broad experience necessary to gain confidence of prospects.

Moral responsibility, explanations and correct representations.  
Thoroughness.

